

STUDY ON REFERRAL OF PATIENTS IN THE DEPARTMENT OF PHYSICAL MEDICINE & REHABILITATION IN CHITTAGONG MEDICAL COLLEGE HOSPITAL

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Abstract

Inter-departmental referral of patients is needed in modern approach of rehabilitation for interdisciplinary and multidisciplinary management of chronic and complex patients. A retrospective observational study on referral of patients was done during the period of one year from 1st July 2005 to 30th June 2006 in the department of Physical Medicine & Rehabilitation in Chittagong Medical College Hospital, which is a tertiary level hospital. The aim of this study was to find out the present situation of referral and inter-departmental relationship about management of patients and to help in future planning for the interdisciplinary and multidisciplinary approach of management of patients. The data were collected from the patients' registers of the department. A total 10,709 patients were attended in the department, from which 1346 (12.57%) patients were referred from different indoor wards. Among 1346 indoor patients 858 (63.75%) were male and 488 (36.25%) were female. Results showed that out of 1346 indoor patients 809 (60.1%) were referred from the Neuromedicine ward and the remaining patients from all other wards and departments.

Introduction

There are seven different models of team-oriented health care practice in modern medical management: parallel, consultative, collaborative, coordinated, multidisciplinary, interdisciplinary and integrative¹. Patients in hospital can develop complaints unrelated to the condition they are admitted for. The treating specialist will then call upon a co-specialist who is specialized in the clinical picture associated with the new complaint². The effective way of medical management of patients is by multidisciplinary and interdisciplinary methods, for which, it needs interdepartmental referral of patients.

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Multidisciplinary approach of patient management means, a term used to describe a treatment planning approach or team that includes a number of doctors and other health care professionals who are experts in different specialties. Multidisciplinary treatment often means a combination of passive treatment modalities and medical literature shows that such treatment remains very useful³. Traditional conceptualization and treatment of chronic pain based solely on biologic factors have proved inadequate for patients with complex pain conditions⁴. Interdisciplinary treatment approach may be defined as a program of combining a multidisciplinary treatment approach provides consistent treatment care in one facility on a daily basis with continuous communications between the professionals and the patient. Both reach a degree of satisfaction as their goals for recovery become realized in a relatively short period of time. Interdisciplinary care is predicated on professionals communicating with one another about a single patient and designing care that is in the overall best interest of the patient⁵.

Rationale

To provide interdisciplinary and multidisciplinary approach of treatment, it requires inter-departmental referral of patients. No previous study on multidisciplinary and interdisciplinary approach of management of patients was undergone in Bangladesh.

This retrospective observational study shows the present situation of referral of patients in the department of physical medicine & rehabilitation. For better management of patients we may use the information achieved from this study for planning a future program for inter-department referral system of patients for interdisciplinary and multidisciplinary approach of management in our country, which is now utilizing in the developed western countries as a model treatment plan.

Aims and objectives

1 Evaluation of present status of referral of patients in the Department of Physical Medicine & Rehabilitation, Chittagong Medical College Hospital.

2. For future planning for interdisciplinary and multidisciplinary approach of management of patients.

Materials and methods

A retrospective observational study was done in the Department of Physical Medicine & Rehabilitation, Chittagong Medical College Hospital during the period from 1st July 2005 to 30th June 2006. The collected data were computed and analyzed with the help of SPSS package program version 12.0.

Results

Out of total 10,709 attending patients, the number of referred patients were 1346 (12.57%) and out door patients 9363 (87.43%) (Table-I). Out of them, 858 (63.75%) were male and 488 (36.25%) female (Table-II). Patients of all ages (Table: III) were referred. Majority of the patients were of 40-70 years age group; in which 31-40 years 124 (9.21%), 41-50 years 196 (14.56%), 51-60 years 293 (21.77%) and 60-70 years 230 (17.09%). Children like 0-10 age group were 117(8.69%) and 11-20 years age group 81 (6.01%) also referred. Above 80 years of patients were 27 (2.05%).

The clinical diagnoses of the referred patients (Table: IV) were; stroke 912 (67.7%), peripheral neuropathy 95 (7.1%) and cerebral palsy 83 (6.2%). Rheumatologic diseases were found 113 (8.4%), Medicine and allied conditions 133 (9.9%). The least number of patients, only 10 (0.7%) were referred with Orthopaedics and traumatic conditions.

Department wise referral of patients were calculated (Table: V). It was found that majority of patients 809 (60.1%) were referred from neuromedicine ward. Remaining patients were referred from, neurosurgery 180 (13.4%), medicine and allied 156 (11.7%), other Surgery and allied 67 (4.9%), Paediatrics 76 (5.6%), Gynae and obstetrics 12 (0.9%), Orthopaedics surgery 7 (0.5%).

Table I : Number attending patients during the study period (n=10,709):

Particulars of patient	No. of patients	Percentage
Indoor (Referred)	1346	12.57
Out door	9363	87.43

Table II : Sex distribution of the study patients (1346)

Sex	Frequency	Percent
Male	858	63.75
Female	488	36.25

Table III : Age distribution of the study patients (1346)

Age group in years	Frequency	Percent
0-10	117	8.69
11-20	81	6.01
21-30	97	7.20
31-40	124	9.21
41-50	196	14.56
51-60	293	21.77
61-70	230	17.09
71-80	101	7.49
Above 80	27	2.05
Missing	80	5.93

Table IV : Diagnosis of the study patients (1346)

Disease	Frequency	Percent
Stroke	912	67.7
Peripheral neuropathy	95	7.1
Rheumatologic diseases	113	8.4
Cerebral palsy	83	6.2
Orthopaedic & Traumatic	10	0.7
Medicine & Others	133	9.9

Table V : Referred from the Departments of the study patients (1346)

Department	Frequency	Percent
Neuromedicine	809	60.1
Neurosurgery	180	13.4
Medicine & allied	156	11.7
Surgery & allied	67	4.9
Paediatrics	76	5.6
Gynae-Obs	12	0.9
Orthopaedics	7	0.5
Others	39	2.9

Discussion

The present study evaluated about the present situation of inter-department referral of patients in Chittagong Medical College & Hospital. Chittagong Medical College & Hospital is a tertiary level hospital in Bangladesh where different levels of medical education including MBBS, postgraduate diplomas and masters degrees are given in about 30 disciplines in medical science. It was found that, out of total 10,709 attending patients in the Department of Physical Medicine and Rehabilitation, the number

of referred patients from different indoor wards were 1346 (12.57%).

Patients of all ages were referred from almost all the indoor wards. It was observed that highest number of patients was referred to the Department of Physical Medicine & Rehabilitation from Neuromedicine ward and the lowest number from Orthopaedic surgery ward. No referred patient was found from cardiac ward for cardiac rehabilitation during the study period.

Modern effective model of patient management should be by multidisciplinary and interdisciplinary approach for which it requires inter-departmental referral. From this study, it was found that the inter-departmental referral of patients is not within expectation and some departments are not participating referring the patients, which also explains the weak inter-departmental motivation .

Stroke rehabilitation continues to be the prototype rehabilitation effort involving all members of interdisciplinary rehabilitation team ⁵. Patients with chronic pain cannot be successfully treated and returned to work unless and until their condition is accurately diagnosed through an evidenced based multidisciplinary approach. It was found that the patients receiving multidisciplinary treatment had significantly less pain, less depression, better ability to assume physical role functions, better social functioning, and less "doctor shopping" behaviour ⁷. de Villiers and colleagues in his study showed that acute heart attacks can be successfully treated through a multidisciplinary team approach involving emergency medical services, emergency physicians, cardiologists and specialty centres ⁸.

The IASP Task Force is strongly committed to the idea that a multidisciplinary approach to diagnosis and treatment is the preferred method of delivering health care to patients with chronic pain of any etiology. A treatment planning approach in which a number of doctors who are experts in different specialties review and discuss the medical condition and treatment options of a patient. The most effective approach to managing the patients is through a multidisciplinary team that focuses on the pathology, impairments, functional limitations and resultant disability ⁹. In stroke rehabilitation it was found that multidisciplinary treatment approach shortens the period of hospital stay of the patients ¹⁰.

Hooten WM, in his study showed that where multidisciplinary pain clinics are less well-implanted, the health care costs for low back pain are higher due to a more intensive use of surgery and consequently, the long-term management of failed back surgery syndrome. The most effective approach to managing the patients with problems of different systems is through a multidisciplinary team that focuses on the pathology, impairments, functional limitations and resultant disability ¹¹. The Agency for Healthcare Policy and Research Guideline for Post-Stroke Rehabilitation (AHCPR, 1995) has concluded: "a considerable body of evidence, mainly from countries in Western Europe, indicates that better clinical outcomes are achieved when patients with acute stroke are treated in a setting that provides coordinated, multidisciplinary stroke-related evaluation and services" ¹².

This study showed that the present model of management of patients did not follow the world wide accepted and effective way of multidisciplinary or interdisciplinary patient care system which was proved from the poor interdepartmental relationship and referral of patients.

Conclusion

For the better management of all types of chronic and complicated patients, interdisciplinary and multidisciplinary approach are proved effective. We need upgrade our present situation of referral of patients through which we may improve our over all health care and service delivery to the patients. Further multi-center and country wide study with larger group of population is recommended.

References

1. Boon H, Verhoef M, O'Hara D, Findlay B. From parallel practice to integrative health care: a conceptual framework. *BMC Health Serv Res*, 2004; 4:15
2. Mulder J, Groenier KH, Dekker JH, Berendsen AJ, Schuling J. *BMC Family Practice*, 2008; 9:55
3. Gatchel RJ, Okifujii A. Executive summary of the APS Task Force on comprehensive pain rehabilitation report. *APS Bulletin* 2006.
4. Weisberg MB, Clavel AL Jr. Why is chronic pain so difficult to treat?: psychological considerations from simple to complex care. *Postgrad Med* 1999; 106:141.

5. Downing, R. Moving toward interdisciplinary pain management. *J Am Anim Hosp Assoc*, 2005; 41:343.
6. Harvey RL, Roth EJ, Yu D. Rehabilitation in Stroke Syndrome. In: In: Braddom RL. Editor. *Physical Medicine & Rehabilitation*. China. Saunders Elsevier Inc, 2007; 51:1175.
7. Hugu V. Impact of a functional restoration program on pain and health –related quality of life in patients with chronic low back pain. *Pain Medicine* 2006; 7:501.
8. de Villiers JS, Anderson T, McMeekin JD, Leung RCM, Traboulsi M. Expedited transfer for primary percutaneous coronary intervention: a program evaluation for the Foothills Interventional Cardiology Service and the Calgary STEMI QIHI group <http://www.cmaj.ca/pressrelease/pg1833.pdf>
9. Task Force on Guidelines for Desirable Characteristics for Pain Treatment Facilities. Discussion IASP. 2007.
10. Sulch D, Perez I, Melbourn A, Kalra RGNL. Randomized controlled trial of integrated care pathway for stroke rehabilitation. *Stroke* 2000; 31:1929.
11. Hooten WM. Treatment outcomes after multidisciplinary pain rehabilitation with analgesic medication withdrawal for patients with fibromyalgia. *Pain Medicine* 2007; 8: 8-16.
12. Duncan PW, Zorowitz R, Bates B, Choi JY, Glasberg JJ, Graham GD, Katz RC, Lamberty K, Reker D. *Stroke* 2005;36:100.